

**ARIZONA GAME AND FISH DEPARTMENT  
HERITAGE DATA MANAGEMENT SYSTEM**

**Plant Abstract**

**Element Code:** PDAST3M2A0

**Data Sensitivity:** No

**CLASSIFICATION, NOMENCLATURE, DESCRIPTION, RANGE**

**NAME:** *Erigeron lemmonii*

**COMMON NAME:** Lemmon's Fleabane

**SYNONYMS:**

**FAMILY:** Asteraceae

**AUTHOR, PLACE OF PUBLICATION:** A. Gray, Proc. Amer. Acad. Arts 19: 2. 1883.

**TYPE LOCALITY:** Huachuca, Arizona, USA.

**TYPE SPECIMEN:** Type: US-49942. J.G. Lemmon 2749, Aug 1882.

**TAXONOMIC UNIQUENESS:** A distinct species in a difficult genus of about 200 species; USDA, NRCS (2004) reports 171 species. Probably closely related to *E. divergens*. Resembles *E. myriomaclis*.

**DESCRIPTION:** A **prostrate perennial** with a slender taproot that **grows in dense clumps in crevices and on ledges of vertical cliffs**. The stems and leaves are densely covered with **long, non-glandular, stiffly spreading hairs** about 6 mm (1/4 inch) long. Stems may reach 60 cm (2 feet) in length, although most are 13-26 cm (5-10 inches) long. These sometimes give rise to erect flowering branches. The **lower leaves are linear** in shape and 6-12 mm (1/4-1/2 inch) long with teeth or shallow lobes. The **upper leaves are entire**. Flower heads are usually single at the ends, but may be numerous. Phyllaries are in 2 nearly equal rows: the outer is thin, green with brown mid-vein, the inner with dry, membranous margins. Rays white to light purple.

**AIDS TO IDENTIFICATION:** *Erigeron lemmonii* is a perennial fleabane that occurs on vertical cliffs at high (6,300-7,300 ft) elevations. Dense, non-glandular hairs cover its stems, and its leaves are dissected below and entire above. The only other species having some of the characteristics of *E. lemmonii* is *E. lobatus*. The latter species lacks entire leaves, is not restricted to cliffs, and has a more erect, robust appearance.

**ILLUSTRATIONS:** Line drawing (USFWS).

Line drawing (Falk et al. 2001).

Color photo of plant and habitat (Warren *in* Falk et al. 2001).

**TOTAL RANGE:** Endemic to Southern Arizona. Confirmed only from Scheelite Canyon, Huachuca Mountains, in Cochise County. Observations of the species from other sites in the Huachuca Mountains and the Santa Rita Mountains are questioned in Gori et al. (1990). They postulate other species of *Erigeron* were misidentified as *E. lemmonii*. The identity of the Santa Catalina Mountains specimens remains in doubt until a taxonomist can review them.

**RANGE WITHIN ARIZONA:** See “Total Range.”

### **SPECIES BIOLOGY AND POPULATION TRENDS**

**GROWTH FORM:** Herbaceous perennial.

**PHENOLOGY:** Flowers from August through October.

**BIOLOGY:** Unknown

**HABITAT:** Plants at the one known locality in the Huachuca Mountains, grow in dense clumps up to about 1.2 m (4 feet) in diameter, in crevices and on ledges of west-, south-, and north-facing cliffs in shady habitat, and on the vertical faces of large boulders along the canyon bottom.

**ELEVATION:** 6,300 - 7,300 ft. (1,922 - 2,227 m).

**EXPOSURE:** West, south, and north.

**SUBSTRATE:** Vertical limestone cliffs.

**PLANT COMMUNITY:** Cliffs within pine-oak woodland community. Associated cliff-dwelling species included *Cheilanthes alabamensis* (Alabama lip fern), *C. arizonica* (Arizona lip fern), *Notholaena limitanea* (= *Argyrochosma limitanea* ssp. *limitanea*, Southwestern false cloak fern), and *Petrophytum caespitosum* (rock spiraea).

**POPULATION TRENDS:** Unknown. The Nature Conservancy counted a total of 108 clumps in 1989 (Gori et al. 1990). All were flowering and producing fruit.

### **SPECIES PROTECTION AND CONSERVATION**

**ENDANGERED SPECIES ACT STATUS:** C (USDI, FWS 2006)  
[C USDI, FWS 1996]  
[C1 USDI, FWS 1993]  
[C2 USDI, FWS 1980]  
[PTN-T USDI, FWS 1975]

**STATE STATUS:** Highly Safeguarded (ARS, ANPL 1999)  
[Highly Safeguarded (ARS, ANPL 1993)]

**OTHER STATUS:** Not Forest Service Sensitive (USDA, FS  
Region 3 1999)  
[Forest Service Sensitive, USDA, FS Region  
3 1990]

**MANAGEMENT FACTORS:** Single known population. Because this species occurs on a cliff face, the probability of human disturbance is low. Possible natural threats to survival include extended drought and rock falls.

**CONSERVATION MEASURES TAKEN:**

**SUGGESTED PROJECTS:** Regular censuses at Scheelite Canyon should be continued and a standardized photo point and count method should be set up. It would also be worthwhile to search in other likely locations for the plant (especially Bear Canyon), to verify Pima County specimens and to encourage further study of the genetics and evolution of this and other cliff-dwelling *Erigeron* at the molecular level.

**LAND MANAGEMENT/OWNERSHIP:** DOD - Fort Huachuca Military Reservation; USFS – Coronado and Tonto National Forests.

**SOURCES OF FURTHER INFORMATION**

**REFERENCES:**

- Arizona Revised Statutes, Chapter 7. 1993. Arizona Native Plant Law. Appendix A.  
Arizona Revised Statutes, Chapter 7. 1999. Arizona Native Plant Law. Appendix A.  
Brooks, A. 1999. *Erigeron lemmonii* (Lemmon Fleabane), Asteraceae. Edited by M. Falk.  
Draft abstract from Arizona Rare Plant Book.
- Cronquist, A. 1947. Revision of the North American Species of *Erigeron*. pp. 264-265.
- Falk, M., P. Jenkins, et al; Arizona Rare Plant Committee. 2001. Arizona Rare Plant Guide.  
Published by a collaboration of agencies and organizations. Pages unnumbered.
- Fletcher, R. 1979. Provisional status report on *Erigeron lemmonii*. U.S. Forest Service,  
unpublished report, Albuquerque, New Mexico.
- Gori, D.F., P.L. Warren, and L.S. Anderson. 1990. Population studies of sensitive plants of  
the Huachuca, Patagonia, and Atascosa Mountains, Arizona. Unpublished Report by The  
Nature Conservancy prepared for Coronado National Forest, Tucson, Arizona.
- Gray, A. 1883. Proc. Am. Acad. 19:2.
- Integrated Taxonomic Information System (ITIS). Retrieved 6/4/2004 from ITIS,  
<http://www.itis.usda.gov>.
- Kearney, T.H., R.H. Peebles with collaborators. 1951. Arizona flora. Second edition with  
supplement by J.T. Howell, E. McClintock and collaborators. 1960. University of  
California Press. Berkeley, California. p. 879.

- Knight, P. 1977. A field study of habitat, distribution, and population status of proposed threatened and endangered plant species of the southern portion of the Coronado National Forest, Arizona. Prepared for U.S. Forest Service, Albuquerque, New Mexico.
- NatureServe. 2004. An online encyclopedia of life [web application]. Version 3.1. Arlington, Virginia, USA: NatureServe. Available: <http://www.natureserve.org/explorer>. (Accessed: June 4, 2004).
- Nesom, G.L. 1989. A New Species of *Erigeron* (Asteraceae: Astereae) from Arizona. *Phytologia* 67(4): 304-3-6
- Phillips, A.M., B.G. Phillips and N. Brian. 1982. Status report on *Erigeron lemmonii* for Office of Endangered Species USFWS. Albuquerque, New Mexico.
- SEINet. Collections Search Result. Accessed 7/1/2004 at <http://seinet.asu.edu/collections/list.jsp>.
- U.S. National Herbarium Type Specimen Register (US). Department of Systematic Biology – Botany, Smithsonian Institution. Accessed: 7/1/2004 from <http://rathbun.si.edu/botany/types/fullRecords.cfm?myFamily=>.
- USDA, Forest Service Region 3. 1990. Regional Forester's Sensitive Species List.
- USDA, Forest Service Region 3. 1999. Regional Forester's Sensitive Species List.
- USDA, NRCS. 2004. The PLANTS Database, Version 3.5 (<http://plants.usda.gov>). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.
- USDI, Fish and Wildlife Service. 1975. Threatened or Endangered Fauna or Flora. Federal Register 40(127): 27829.
- USDI, Fish and Wildlife Service. 1980. Endangered and Threatened Wildlife and Plants; Review of Plant Taxa for Listing as Endangered or Threatened Species. Federal Register 45(242): 82506.
- USDI, Fish and Wildlife Service. 1993. Plant Taxa for Listing as Endangered or Threatened Species; Notice of Review. Federal Register 58(188): 51163.
- USDI, Fish and Wildlife Service. 1996. Endangered and Threatened Wildlife and Plants; Review of Plant and Animal Taxa that are Candidates for Listing as Endangered or Threatened Species; Notice of Review; Proposed Rule. Federal Register 61(40): 7604.
- USDI, Fish and Wildlife Service. 2006. Endangered and Threatened Wildlife and Plants; Review of Native Species that are Candidates or Proposed for Listing as Endangered or Threatened; Annual Notice of Findings on Resubmitted Petitions; Annual Description of Progress on Listing Actions. Federal Register 71(176): 53756-53835.
- Warren, P. et al. 1991. Status Report *Erigeron Lemmonii*. Submitted to the USFWS.

**MAJOR KNOWLEDGEABLE INDIVIDUALS:**

- Arthur Cronquist - New York Botanical Garden, Bronx.
- Reggie Fletcher - Regional Ecologist, USFS Region 3, Albuquerque, New Mexico.
- Art Phillips - Private Consultant Flagstaff, Arizona.
- Barb Phillips - Zone Botanist, Coconino, Kaibab and Prescott national forests, Flagstaff, Arizona.

**ADDITIONAL INFORMATION:**

Cliffy areas in Tanner (= Garden) Canyon in the Huachuca Mountains were surveyed in 1989 (Gori et al. 1990). No *Erigeron lemmonii* was found. The authors suggest that because of the proximity of the two canyons, the type specimen may have actually been collected in Scheelite Canyon, a tributary of Garden Canyon and the locality of the extant population.

**Revised:** 1990-03-05 (SST)  
1991-10-20 (BKP)  
1991-12-04 (SR)  
1997-11-12 (SMS)  
1999-12-20 (DJG)  
2004-06-04 (AMS)

To the user of this abstract: you may use the entire abstract or any part of it. We do request, however, that if you make use of this abstract in plans, reports, publications, etc. that you credit the Arizona Game and Fish Department. Please use the following citation:

Arizona Game and Fish Department. 20XX (= **year of last revision as indicated at end of abstract**). X...X (= **taxon of animal or plant**). Unpublished abstract compiled and edited by the Heritage Data Management System, Arizona Game and Fish Department, Phoenix, AZ. X pp.